STATE OF GEORGIA

TMDL IMPLEMENTATION PLAN FOR: ____Big Slough___ (STREAM) Fecal Coliform (PARAMETER) RIVER BASIN: ___Flint_____ PLAN DATE: _____

Prepared by: __Southwest Georgia Regional Development Center Address: _30 West Broad Street City: Camilla___ State: ___GA_ Zip:__31730_ e-mail:_www.swgrdc.org_____ Date Submitted to EPD: ____09/30/04____	Or Prepared By: _____ Address: _____ City:_____State: _____ Zip: _____ e-mail: _____ Date Submitted to EPD: _____

General Information

Obtain this information from the TMDL document or other information. When completed, this document will be a self-contained report independent of the TMDL document.

TMDL ID (to be entered by EPD)	
Water body name	Big Slough
HUC basin name	Flint
HUC number	0313000805
Primary county	Mitchell
Secondary county	N/A
Primary RDC	Southwest Georgia
Secondary RDC	N/A
Water body location	Tributary from Camilla along Hwy 97 South
Miles or area impacted	4 miles
Parameter addressed in plan	Fecal Coliform
Water use classification	Fishing
Degree of impairment	Partially supporting use Not supporting use X
Date TMDL approved by EPA	2/19/1998
Impairment due to	Point sources ☐ Nonpoint sources **X** Both ☐

Point source-Form A; Nonpoint source-Form B; Both-Form A+B+C

Significant Stakeholders

Identify local governments, agricultural organizations or significant landholders, commercial forestry organizations, businesses and industries, and local organizations including environmental groups with a major interest in this water body.

Name/Organization	Mitchell County Board of Commissioners				
Address	P.O. Box 187				
City	Camilla	State	GA	Zip	31730
Phone	(229) 336-2000			E-mail	
Name/Organization	Mitchell County Health Department				
Address	88 West Oakland Ave.				
City	Camilla	State	GA	Zip	31730
Phone	(229) 336-2055			E-mail	
Name/Organization	City of Camilla				
Address	P.O.Box 328				
City	Camilla	State	GA	Zip	31730
Phone	(229) 336 - 2220			E-mail	
Name/Organization	NRCS				
Address	1479-B US 19 South				
City	Leesburg	State	GA	Zip	31763
Phone	229-883-5597			E-mail	
Name/Organization					
Address					
City		State		Zip	
Phone				E-mail	

If more, add to comments on last page.

SUMMARY OF ALLOCATION MODEL RESULTS FROM TMDL DOCUMENT (existing load, target TMDL, and needed reduction)

EXISTING LOAD	**TARGET TMDL**	**NEEDED REDUCTION**
4.64E+12	4.43E+12	5%

I. IDENTIFY **POTENTIAL NON-POINT SOURCE** CATEGORIES AND SUBCATEGORIES OR INDIVIDUAL SOURCES WHICH MUST BE CONTROLLED TO IMPLEMENT LOAD ALLOCATIONS:

List major non-point sources **potentially** contributing to impairment including those identified in TMDL document.

POTENTIAL SOURCE	**DESCRIPTION OF POTENTIAL CONTRIBUTION TO IMPAIRMENT**	**RECOMMENDED LOAD REDUCTION (FROM TMDL)**
Urban Land Uses	Urban Storm Water Run-off	5% (Total all Categories)
Residential Land Uses	Leaking Septic Tanks, Animal Waste, Leaking Sewer Lines	
Public Land Uses	There is very little public land within the Big Slough Drainage Area. 14.3 % of the watershed's acreage is used for Pasture or Hay, which when combined with the presence of a number of CAFO's with upwards of 4300 cattle, 11600 swine, 610 horses, 100 goats grazing and a grand total of 31355778 chickens (sold) within the region creates a potentially significant source of fecal runoff. .In addition to the livestock there are also significant communities of wild animals within the area.	
Municipal Uses	The City of Camilla's Wastewater Treatment Complex	

II. DESCRIBE ANY REGULATORY OR VOLUNTARY ACTIONS INCLUDING MANAGEMENT MEASURES OR OTHER CONTROLS BY GOVERNMENTS OR INDIVIDUALS THAT SPECIFICALLY APPLY TO THE POLLUTANT AND THE WATERBODY FOR WHICH THE TMDL WAS WRITTEN, THAT WILL BE ACCOMPLISHED THROUGH RELIABLE AND EFFECTIVE DELIVERY MECHANISMS, AND THAT WILL HELP ACHIEVE THE LOAD ALLOCATIONS IN THE TMDL:

See the attachment for more instructions.

EXISTING OR REQUIRED REGULATORY ACTIONS

RESPONSIBLE GOVERNMENT, ORGANIZATION OR ENTITY	**NAME OF REGULATION /ORDINANCE**	**DESCRIPTION**	**ENACTED OR PROJECTED DATE (mm/yy)**	**STATUS**
Mitchell County Health Dept.	Sanitary Code	Installation of on-site sewerage systems	1970's	In-force
Mitchell County	Zoning Ordinance	Land Use Regulations	2000	In-force
Mitchell County	State of Georgia Soil & Sedimentation Control Act	Construction code to reduce pollutants to navigable waters	1980's	In-force
City of Camilla	Zoning Ordinance	Land Use Regulations	1990's	In-force
City of Camilla	State of Georgia Soil & Sedimentation Control Act	Construction code to reduce pollutants to navigable waters	1980's	In-force
Mitchell County	Local Wetlands Policy Ordinance	Georgia Planning Act Part V: Environmental Criteria. This ordinance regulates development of areas designated as wetlands as defined by the U.S. Army Corps of Engineers as jurisdictional wetlands.	2001	In-force
Mitchell County	Floodplain Management Ordinance	100 year / 500 year flood levels are shown on FEMA flood maps	2001	In-force
City of Camilla	Local Wetlands Policy Ordinance	Georgia Planning Act Part V: Environmental Criteria. This ordinance regulates development of areas designated as wetlands as defined by the U.S. Army Corps of Engineers as jurisdictional wetlands.	2001	In-force
City of Camilla	Floodplain Management Ordinance	100 year / 500 year flood levels are shown on FEMA flood maps	2001	In-force

EXISTING VOLUNTARY ACTIONS

RESPONSIBLE ORGANIZATION OR ENTITY	**NAME OF ACTION**	**DESCRIPTION**	**ENACTED OR PROJECTED DATE (mm/yy)**	**STATUS**
Forestry and Agricultural Stakeholders	Best Management Practices	Soil and Sedimentation Control Ordinance	Ongoing	Ongoing
Mitchell County	Big Slough Water Quality Incentive Project	Grants to concentrate on ground water degredation	1997-2000	Ongoing
Mitchell County	Code Enforcement Officer	The Code Enforcement Officer has the authority to write citations, fine, and take to Magistrate Court if someone is found to be in violation.	2000	Current
City of Camilla	Code Enforcement Officer	The Code Enforcement Officer has the authority to write citations, fine, and take to Municipal Court if someone is found to be in violation.	1980's	Current

Note: *All organizations listed in tables are considered stakeholders.*

Additional recommended regulatory or other measures, which should be implemented to reduce the loads of the TMDL parameter

ENTITY/ORGANIZATION RESPONSIBLE	NAME OF PROPOSED REGULATION/ORDINANCE/ OTHER	DESCRIPTION	ENACTED OR PROJECTED DATE (mm/yy)	STATUS
Mitchell County / City of Camilla	Periodic Monitoring	Monitor impaired stream segments for fecal Coliform	2002	Pending Funding
Flint River Basin Management Plan	Water Quality Management Plan Part V Groundwater Recharge	Implement regulatory/voluntary activities to meet water quality goals	2005	Ongoing

III. SCHEDULE FOR IMPLEMENTING MANAGEMENT MEASURES OR OTHER CONTROL ACTIONS:

These must be implemented as expeditiously as practicable within five years of when the implementation plan is accepted by EPA.

IMPLEMENTATION ACTION	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Form stakeholders group	X				
Organize implementation work with stakeholders and local officials to identify remedial measures and potential funding sources	X	X			
Identify sources of TMDL parameter	X				
Develop management programs to control runoff including identification and implementation of BMPs (Phase I): Agriculture	X	X			
Forestry					
Urban	X	X			
Mining					
Organize and implement education and outreach programs	X	X	X		
Detect and eliminate illicit discharges					
Evaluate additional management controls needed			X	X	X
Monitor and evaluate results		X		X	
Reassess TMDL allocations				X	X
Provide periodic status reports on implementation of remedial activities			X		X
If needed, begin process for Phase II (next 5 years) and subsequent phases					

IV. PROJECTED ATTAINMENT DATE AND BASIS FOR THAT PROJECTION:

The projected attainment date is 10 years from acceptance of the implementation plan by EPA.

V. MEASURABLE MILESTONES:

- Number of management controls and activities already implemented ____4____

- Number of management controls and activities proposed in five-year work program ____2____

- Number of management controls and activities actually implemented in five-year work period _____ (to be completed after 5 years)

- Stream sampled to identify areas of concern See monitoring plan

- Other _____ _____

- Other _____ _____

VI. MONITORING PLAN:

Monitoring data that placed stream on 303(d) list will be provided if requested.

Describe previous or current sampling activities or other surveys to detect sources or to measure effectiveness of management measures or other controls.

ORGANIZATION	TIME FRAME	PARAMETERS	PURPOSE	STATUS
???-Funding must be identified	As soon as possible	Fecal Coliform	Determine if fecal coliform levels still warrant listing the branch on the 303(d) list	Funding for monitoring must be identified
???-Funding must be identified	If additional monitoring determines F.C. levels exceed limits	Fecal Coliform	Monitor branch at several different points to identify source of contamination. Implement necessary measures to decrease F.C. load	Needs to be done if stream is not de-listed; Funding must be identified.
???-Funding must be identified	After sources are determined and measures to abate are implemented	Fecal Coliform	Periodic monitoring to determine if implemented measures are successful	Needs to be done if stream is not de-listed; Funding must be identified.
The City of Camilla's Wastewater Treatment Complex	Continuous	Fecal Coliform, Flow, Biochemical Oxygen	New Wastewater Treatment process is a land application system that does	Continuous

		Demand, Ammonia, Total Residual Chlorine, pH, Dissolved Oxygen, Temperature, etc.	not drain into Big Slough. However, the city monitors plant for aforementioned pollutants.	

Describe any planned or proposed sampling activities or other surveys. (Scheduled EPD sampling can be found in the Basin Planning document.)

ORGANIZATION	TIME FRAME	PARAMETERS	PURPOSE	STATUS
EPD	2003-2004	Fecal Coliform	Basin planning	N/A
Mitchell County	2002	Fecal Coliform	Test for impairment	N/A

VII. CRITERIA TO DETERMINE WHETHER SUBSTANTIAL PROGRESS IS BEING MADE:

- % Concentration or load change (monitoring program)

- Categorical change in classification of the stream (delisting the stream is the goal)

- Regulatory controls or activities installed (ordinances, laws)
  See Section II
- Best management practices installed (agricultural, forestry, urban)

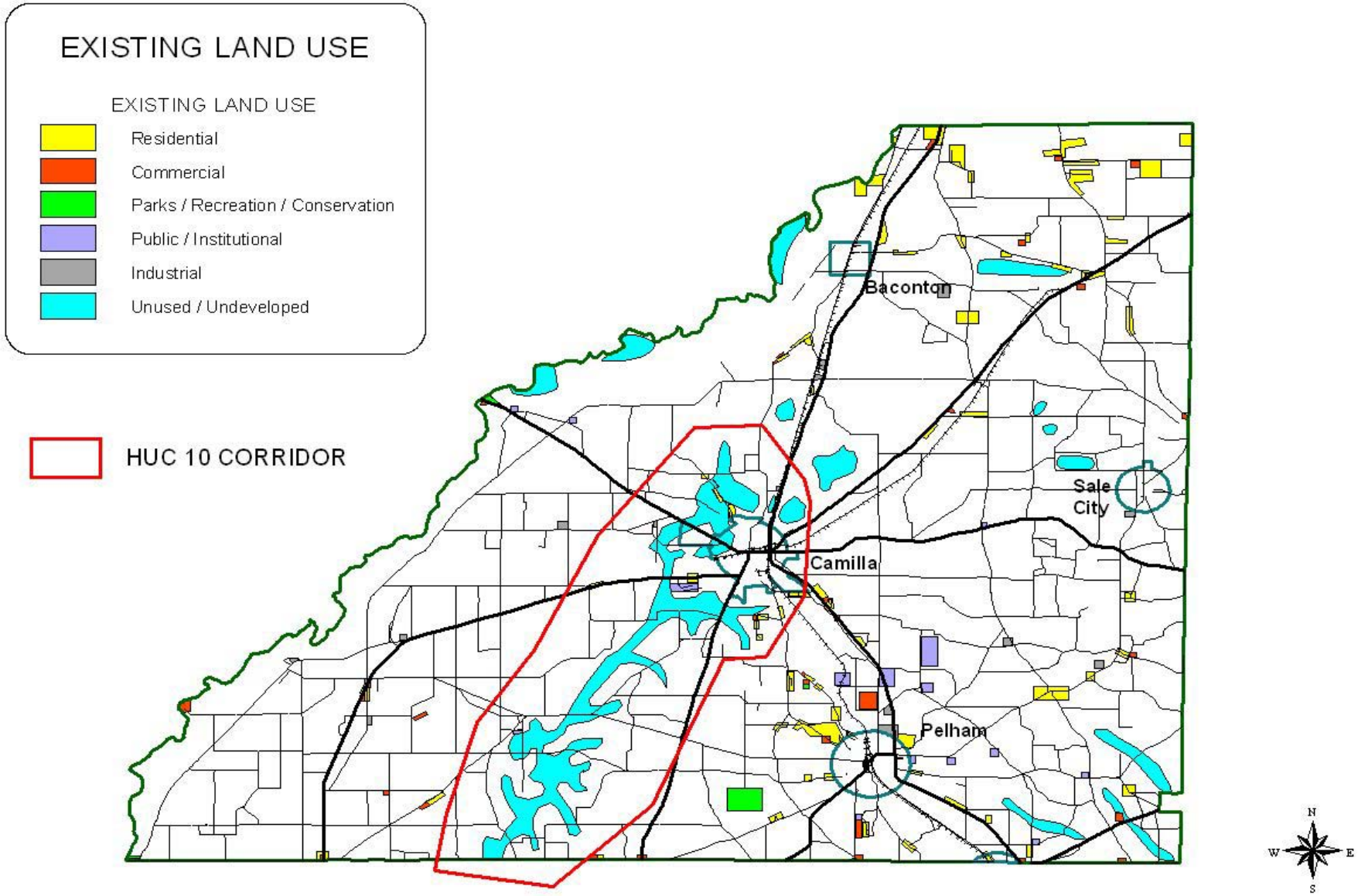
COMMENTS

The following comments pertain to this plan revision.

After reviewing the aerial photography of Big Slough, surveying the area and utilizing RDC land use data, it should be noted that this area is primarily given over to agriculture, with farming, poultry and cattle production. 49 % of the available land is used for row crops and 24 % is forestry. The open sink holes and thinly covered crevices in the Big Slough Watershed provide very little filtering of pollutants to the underground water supply. Sink holes are a natural occurrence in areas in which many of the geologic substrata are sedimentary, and in this case, primarily limestone. Erosion by subsoil water movements often create small caverns, their subsequent collapse then creates indentations at the surface which are commonly covered with a thinner layer of topsoil, which in turn limits their filtering actions. The ubiquity of these sink holes in the region makes an accurate count of them impossible.

A number of poorly constructed wells were found to be contaminated after the 1994 floods.

Poorly maintained septic lines and drain lines installed before 1984 are also probable sources of contamination These problems were corrected by those responsible and these instances are thought to have possibly contributed to the high fecal coliform counts in the sampling that was done back in 1998. Mitchell County is one of fifteen counties noted for high concentrations of livestock and poultry production.



SOUTHWEST GEORGIA REGIONAL DEVELOPMENT CENTER	**EXISTING LAND USE**	**MITCHELL COUNTY**